

STAT

Page Denied

STAT

HIGH-SPEED DRILLING IN USSR PETROLEUM INDUSTRY

Trud
Moscow, 15 Oct 1953

V. Kalamkarov,
Dep Minister
of Petroleum Industry USSR

The growth of petroleum production depends largely upon developmental and exploratory drilling. It is necessary systematically to increase the rate of drilling oil wells and the rate of industrial exploitation of petroleum deposits. Despite many outstanding drilling enterprises, many do not fulfill their drilling plans.

Drilling speeds are very important in the drive to lower the cost of production. In the Tuymazanef't' Trust in 1953, the volume of drilling was 15 times greater than in 1940. If the speed of drilling had remained the same, the increased volume of work would have required 75 drilling brigades. However, since the drilling speed became nearly 3 1/2 times greater, 22 brigades were able to cope with the task.

Last year, on the initiative of leading drilling foremen, socialist competition [presumably on an all-union basis] for high drilling speeds and for reducing the cost of drilling was conducted. One result was that 304 brigades successfully fulfilled the 1952 plan, drilling 288,400 meters above the plan. In the first half of 1953, 592 brigades already have distinguished themselves.

Oil workers of the eastern regions, working in difficult formations, initiated high-speed drilling. Innovators of the Bashkirskaya ASSR drilled wells from three to four times faster than in 1940. Drillers of neighboring Tatarskaya ASSR have not fallen behind the Bashkir drillers.

Among other technological improvements made by drillers of the eastern regions is the drilling of wells with water in place of the usual mud solution. In addition, innovators made use of the forced system of drilling, involving an increase in the volume of liquid [drilling solution] forced into the well, an increase in the load on the bit, and improved control over equipment.

Leading drilling foremen increased the use of working time up to 90 percent and the greater part of this utilized time is spent on basic production operations. All of these measures have resulted in a reduction in the cost of drilling per meter. Using the new technology and organization of labor, each brigade of the eastern regions is able to drill wells at great speeds, drilling not less than 12,000-15,000 meters per year.

Great successes also have been achieved by oil workers of the southern regions of the USSR. Here the strata are softer, but drilling depths are greater and drilling conditions are complicated. Drillers of the southern regions have introduced many technological improvements. The new method of dual-shaft drilling is being used more extensively at the offshore petroleum areas of Azerbaydzhan. In addition, the multihorizon drilling method is being successfully used at Baku.

Attainments of progressive workers indicate the tremendous possibilities for speeding up the drilling of oil wells. However, these possibilities are far from being utilized sufficiently. Average drilling speeds are substantially lower than the records which have been established. The basic problem is to extend the methods of innovators to all drilling brigades and to accomplish the conversion of all drilling brigades to a forced drilling system.

STAT

High drilling speeds are being held back partly because of a lag in derrick assembly work, which must be overcome. Increasing the speed of drilling also depends on the improvement of the quality and durability of bits, the speeding up of lifting and lowering operations, and the improvement of auxiliary and preliminary work on wells by further mechanization.

- E N D -

STAT

- 2 -